WHAT IS CLAIMED IS:

- 1. A data acquisition apparatus comprising multiple input modules having different measurement intervals, wherein said data acquisition apparatus is characterized in that a control means is provided for simultaneously driving each input modules at a desired measurement interval.
- The data acquisition apparatus described in claim 1, characterized in that a measurement start command transmission control means, which selectively sends measurement start commands to the individual input modules, is provided as a control means.
- 3. The data acquisition apparatus described in claim 2, characterized in that the measurement start command transmission

control means is a memory, which stores in tabular format the input modules to which measurement start commands are to be sent in the measurement start command transmission timing.

- 4. The data acquisition apparatus described in any of the claims

 1 through 3, characterized in that each input module has multiple

 measurement channels.
- 5. The data acquisition apparatus described in claim 4, characterized in that the measurement interval for each measurement channel in each input module differs based on the measurement start command.
- 6. The data acquisition apparatus described in claim 1,

characterized in that a timing circuit, which outputs a sampling timing signal of a prescribed interval based on a common measurement start command, is provided as a control means to each input module.

- 7. The data acquisition apparatus described in claim 6, characterized in that each input module has multiple measurement channels.
- 8. The data acquisition apparatus described in claim 6, characterized in that the measurement interval for each measurement channel in each input module is different.